REMARKS

In the present application, claims 1-20 are pending. Claims 1-20 are rejected. Claims 1, 7, 14, and 18 are amended. No new matter has been added. As a result of this response, claims 1-20 are believed to be in condition for allowance.

The Amendment

Claims 1, 7, 14 and 18 have been amended to recite that the mobile station is preferentially granted system resources, as compared to another mobile station requesting call admission and having a lower bandwidth requirement. Support for this amendment can be found, at least, at page 13, lines 14-18 of the specification.

Claim Rejections - 35 USC § 103

The Examiner rejected claims 1, 2, 4-8, and 10-20 as being unpatentable over Bourlas et al. (2002/0119783) in view of Demjanenko et al. (2002/0051501).

With regards to independent claims 1, 14, and 18, the Examiner asserts that Bourlas discloses a method for granting system access to mobile stations, and "granting system resources to the mobile station based at least in part on a bandwidth requirement of the mobile station, wherein for a mobile station having a high bandwidth requirement, the mobile station is preferentially granted system resources, *as compared to another mobile station having a lower bandwidth requirement* (In Paragraphs 39 and 40 Bourlas teaches that a mobile seeking a T1-type continuous data services is granted more bandwidth as opposed to a mobile seeking a TCP/IP bursty data services provided the bandwidth availability in the system and other parameters allow such preferential allocation.), by being assigned a plurality of time slots per frame for forming one radio information block (See Paragraphs 9, 30-33, 39, 45, 80-82 and Figure 4). The Examiner further allows that Bourlas "fails to expressively disclose the modulation schemes are operated with a coding technique that employs an iterative decoding technique." However, the Examiner continues, "Demjanenko discloses a technique for coding and decoding signals used in data transmission over wired and wireless systems that use Turbo Codes."

Claims 1, 7, 14 and 18 have been amended to recite that the mobile station is

preferentially granted system resources, as compared to another mobile station **requesting call admission and** having a lower bandwidth requirement.

Claim 1 now recites, in part:

> granting system resources to the mobile station based at least in part on a bandwidth requirement of the mobile station, wherein for a mobile station having a high bandwidth requirement, the mobile station is preferentially granted system resources, **as compared to another mobile station requesting call admission and having a lower bandwidth requirement,** by being assigned a plurality of time slots per frame for forming one radio information block, and is operated with a coding technique that employs an iterative decoding technique. (emphasis added).

In contrast, Bourlas teaches controlling the admission of connections in a wireless communication system based upon the existing resource allocation to existing connections. To make clear the distinction between the teachings of Bourlas and the recitations of claim 1, the Examiner's citations of paragraphs 9, 39, 45, and 80-82 of Bourlas are each discussed herein. Paragraphs 30-33 do not deal with the granting of system resources.

At paragraph 9 of Bourlas there is described "a method for controlling the admission of connections in a wireless communication system". It is further stated that the method "comprises receiving a request for a new connection from a requesting CPE, summing the hard bandwidth requirements between a base station and associated CPEs, **including the new connection and existing connections** . . . and **if additional air link resources are available, allocating the air link resources to the new connection, else suspending at least one of the existing connections between the base station and the associated CPEs.**"

As is evident from this description, Bourlas teaches summing the bandwidth requirements of the existing connections of a wireless communication system with the requirements of the new connection to determine if there are sufficient resources to

allocate to the new connection. If there are not sufficient resources, the new connection may be allocated resources while an existing connection is suspended. Bourlas further teaches that to accommodate a new connection from a requesting CPE, an existing connection may be bandwidth-limited or at least one existing connection may be suspended. Paragraph 82 states that suspension may be random or rotate in a round robin fashion.

Paragraph 39 states that "A CPE or base station can continue an existing connection or allow a new connection depending on, for example, a user's defined quality of service, bandwidth needs, and transmission quality". While paragraph [0040] does describe the differing bandwidth requirements of T1-type continuous data services versus Internet Protocol data services (TCP/IP), there is not taught preferentially granting system resources between two mobile stations requesting call admission as is claimed.

With respect to paragraph 45, the Examiner has cited a section that succinctly summarizes the method of Bourlas. The relevant portion of paragraph 45 is as follows:

> "All of the hard bandwidth commitments from the CPEs can then be **summed to get the total hard bandwidth commitments for all of the existing connections** through base station 102. The control module 212 can perform these calculations. The CAC module 206 **compares the total hard bandwidth commitments to an air link line rate**. The air link line rate is the amount of bandwidth available between the CPEs and base station. **If the air link line rate exceeds the total hard bandwidth commitments, the new connection is allowed. If the total hard bandwidth commitments meet or exceed the air link line rate, the CAC module 206 denies the new connection**." (emphasis added)

Once again, Bourlas describes granting system resources to a new connection based upon a bandwidth commitments for existing connections. There is no teaching of preferentially granting system resources to a new connection based upon the requirements of an additionally requested new connection.

Lastly, with reference to paragraphs 80-82, Bourlas teaches the method by which

a new connection is established. Bourlas describes, at paragraph 60, that "The precedence module 210 interfaces with the receiver module 202 and the control module 212 to apply a priority, or precedence, to one or more connections when less bandwidth is available than required to meet the hard bandwidth commitments. . . . The precedence module 210 determines which connection(s) are to be suspended." Returning to paragraphs 80-82, Bourlas teaches, at paragraph 82, that "if additional air link resources are not available, flow moves to a block 520 where the precedence module 210 suspends existing connections between the base station 102 and the CPEs 104. As described above, the precedence module 210 can, for example, suspend connections only between the base station and the affected CPE, randomly suspend connections between the base station and all of the CPEs in a sector 106, or suspend connections between the base station and all of the CPEs in the sector in a round-robin fashion". It is therefore evident that Bourlas is teaching various methods of suspending existing connections based upon a precedence of each existing connection. Once again, Bourlas does not teach preferentially granting system resources to a mobile station requesting call admission **as compared to another mobile station requesting call admission** as claimed.

It is therefore asserted that Bourlas does not teach or suggest this element of claim 1. Likewise, Demjanenko does not teach or suggest, nor does the Examiner assert that Demjanenko teaches or suggests, this element of claim 1. As a result, the combination of Bourlas and Demjanenko, such a combination neither suggested nor deemed appropriate, similarly fails to teach or suggest this element as recited in claim 1. Claim 1 is therefore in condition for allowance. As remaining independent claims 7, 14 and 18 recite an element substantially similar to that discussed above with reference to claim 1, claims 7, 14 and 18 are likewise in condition for allowance. As all of claims 2, 4-8, 10-13, 15-17, and 19-20 depend upon claims 1, 14, and 18, they are likewise in condition for allowance.

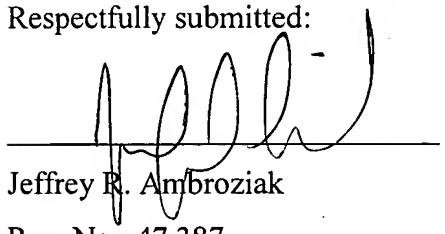
The Examiner rejected claims 3 and 9 as being unpatentable over Bourlas et al. in view of Demjanenko in further view of Raghavan (2003/0134607). Specifically, the Examiner asserts that Raghavan teaches "a multi-channel communications transceiver that uses any combination of modulation systems such as PAM and QAM." While taking no position as to the Examiner's assertions regarding the teachings of Raghavan, it

is sufficient to note that Raghavan does not teach preferentially granting system resources to a mobile station requesting call admission **as compared to another mobile station requesting call admission** as claimed. As a result, the combination of Bourlas, Demjanenko, and Raghavan, such a combination neither suggested nor deemed appropriate, similarly fails to teach or suggest this element as recited in claim 1. As claims 3 and 9 are dependent upon claim 1, they are likewise in condition for allowance.

An earnest and thorough attempt has been made by the undersigned to resolve the outstanding issues in this case and place same in condition for allowance. If the Examiner has any questions or feels that a telephone or personal interview would be helpful in resolving any outstanding issues which remain in this application after consideration of this amendment, the Examiner is courteously invited to telephone the undersigned and the same would be gratefully appreciated.

It is submitted that the claims herein patentably define over the art relied on by the Examiner and early allowance of same is courteously solicited.

Respectfully submitted:



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